

WEST

Generate Collection

Print

L15: Entry 12 of 14

File: USPT

Jul 28, 1998

US-PAT-NO: 5787470

DOCUMENT-IDENTIFIER: US 5787470 A

TITLE: Inter-cache protocol for improved WEB performance

DATE-ISSUED: July 28, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
DeSimone; Antonio	Ocean	NJ		
Shur; David Hilton	Middletown	NJ		
Sibal; Sandeep	Matawan	NJ		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
AT&T Corp	Middletown	NJ			02

APPL-NO: 8/ 733485 [PALM]

DATE FILED: October 18, 1996

INT-CL: [6] G06 F 12/00

US-CL-ISSUED: 711/124; 711/165, 395/200.48, 395/200.56, 395/200.6, 395/200.68

US-CL-CURRENT: 711/124; 709/218, 709/226, 709/230, 709/238, 711/165

FIELD-OF-SEARCH: 395/440, 395/445, 395/446, 395/447, 395/448, 395/451, 395/468, 395/471, 395/621, 395/200.53, 395/473, 395/608, 395/610, 395/200.3, 395/200.31, 395/200.32

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4959777</u>	September 1990	Holman, Jr.	395/468
<input type="checkbox"/>	<u>5222224</u>	June 1993	Flynn et al.	395/471
<input type="checkbox"/>	<u>5226144</u>	July 1993	Moriwaki et al.	395/448
<input type="checkbox"/>	<u>5452447</u>	September 1995	Nelson et al.	395/621
<input type="checkbox"/>	<u>5510934</u>	April 1996	Bremman et al.	395/446
<input type="checkbox"/>	<u>5511208</u>	April 1996	Boyles et al.	395/200.53
<input type="checkbox"/>	<u>5586298</u>	December 1996	Shah	395/473
<input type="checkbox"/>	<u>5604882</u>	February 1997	Hoover et al.	395/448
<input type="checkbox"/>	<u>5611049</u>	March 1997	Pitts	395/608
<input type="checkbox"/>	<u>5623656</u>	April 1997	Lyons	395/610

ART-UNIT: 272

PRIMARY-EXAMINER: Swann; Tod R.

ASSISTANT-EXAMINER: Tzeng; Fred F.

ATTY-AGENT-FIRM: Gurey; Stephen M.

ABSTRACT:

On the Internet, different caches may contain copies of objects that have been copied from originating servers when they were accessed by users. Interconnected caches may have different objects stored thereon that might at some time be requested by a client terminal that is connected to a cache other than the one on which the object is stored. Rather than awaiting a request for a particular object and then querying each neighbor cache to determine whether a copy of the requested object is stored thereon, and then downloading the requested object if it is found, information about the contents of the neighbor caches is exchanged between these caches so that when a request for an object is received, the object can be retrieved from the cache in which it is stored. In the alternative, the object may be retrieved from the originating server if, for example, the object stored in a cache is stale based on the date and time it was last modified in the cache.

12 Claims, 6 Drawing figures

WEST

Generate Collection

Print

L9: Entry 15 of 18

File: USPT

Jul 4, 2000

US-PAT-NO: 6085193

DOCUMENT-IDENTIFIER: US 6085193 A

TITLE: Method and system for dynamically prefetching information via a server hierarchy

DATE-ISSUED: July 4, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Malkin; Peter Kenneth	Ardsley	NY		
Yu; Philip Shi-lung	Chappaqua	NY		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
International Business Machines Corporation	Armonk	NY			02	

APPL-NO: 8/ 939277 [PALM]

DATE FILED: September 29, 1997

INT-CL: [7] G06 F 17/30

US-CL-ISSUED: 707/10; 707/3, 707/104, 707/200, 395/200.3, 364/281.5, 364/282.1, 364/282.4

US-CL-CURRENT: 707/10; 707/104.1, 707/200, 707/3, 709/200

FIELD-OF-SEARCH: 707/3, 707/10, 707/200, 707/104, 707/202, 707/204, 395/200.3, 364/281.5, 364/282.1, 364/282.4, 364/200.3, 364/2

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5228859</u>	July 1993	Rowe	434/118
<input type="checkbox"/>	<u>5596748</u>	January 1997	Kleewein et al.	707/10
<input type="checkbox"/>	<u>5603025</u>	February 1997	Tabb et al.	707/2
<input type="checkbox"/>	<u>5640555</u>	June 1997	Kleewein et al.	707/10
<input type="checkbox"/>	<u>5652858</u>	July 1997	Okada et al.	711/137
<input type="checkbox"/>	<u>5706507</u>	January 1998	Schloss	707/104
<input type="checkbox"/>	<u>5742762</u>	April 1998	Scholl et al.	395/200.3
<input type="checkbox"/>	<u>5748897</u>	May 1998	Katiyar	395/200.49
<input type="checkbox"/>	<u>5754938</u>	May 1998	Herz et al.	345/327
<input type="checkbox"/>	<u>5754939</u>	May 1998	Herz et al.	345/327
<input type="checkbox"/>	<u>5781909</u>	July 1998	Logan et al.	707/200
<input type="checkbox"/>	<u>5799309</u>	August 1998	Srinivasan	707/102
<input type="checkbox"/>	<u>5805809</u>	September 1998	Singh et al.	395/200.33
<input type="checkbox"/>	<u>5812996</u>	September 1998	Rubin et al.	707/2
<input type="checkbox"/>	<u>5818448</u>	October 1998	Katiyar	345/335
<input type="checkbox"/>	<u>5822749</u>	October 1998	Agarwal	707/2
<input type="checkbox"/>	<u>5828851</u>	October 1998	Nixon et al.	395/285
<input type="checkbox"/>	<u>5835087</u>	November 1998	Herz et al.	345/327
<input type="checkbox"/>	<u>5835718</u>	November 1998	Blewett	395/200.48
<input type="checkbox"/>	<u>5848413</u>	December 1998	Wolff	707/10
<input type="checkbox"/>	<u>5862325</u>	January 1999	Reed et al.	395/200.31
<input type="checkbox"/>	<u>5926179</u>	July 1999	Matsuda et al.	

OTHER PUBLICATIONS

Kun-Lung Wu et al., "SpeedTracer: A Web Usage Mining and Analysis Tool", IBM Systems Journal, vol. 37, No. 1, pp. 89-105, 1998.

ART-UNIT: 277

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Corrielus; Jean M.

ATTY-AGENT-FIRM: Ratner & Prestia

ABSTRACT:

A method and system for prefetching data for clients associated with a proxy server hierarchy and an enhanced content server data transfer to the clients. The method for prefetching data identifies data access patterns and prefetches select information based on a dynamic interpretation of the data access patterns. The content server or proxy server identifies data access reference patterns of clients associated with the content server or the proxy server hierarchy. The data access patterns are preferably stored in a statistics table. The content server generates prefetch hint information based on inputs from the statistics table. The prefetch hint information annotates requested information or objects requested by the clients. The prefetch hint information optimally is updated as the requested information passes through the proxy server hierarchy. The prefetch hint information annotates the requested information requested by the clients. The ultimate decision to prefetch select information for the clients is made based on the prefetch hint information and prefetch hint values. The prefetch hint value is calculated based on local node-specific factors, such as storage constraints and access time.

18 Claims, 15 Drawing figures

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)[Cases](#)**Search Results -**

Terms	Documents
L14 and copi\$	14

Database:

US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:[Refine Search](#)[Recall Text](#)[Clear](#)**Search History****DATE:** Wednesday, February 06, 2002 [Printable Copy](#) [Create Case](#)

Set Name **Query**
side by side

Hit Count **Set Name**
result set

DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L15</u>	L14 and copi\$	14	<u>L15</u>
<u>L14</u>	L13 and quer\$ near caches	31	<u>L14</u>
<u>L13</u>	Web near server\$ or network near server\$	14205	<u>L13</u>
<u>L12</u>	Web near server\$	6166	<u>L12</u>
<u>L11</u>	l10 and cop\$	0	<u>L11</u>
<u>L10</u>	l1 and quer\$ near cache	12	<u>L10</u>
<u>L9</u>	L8 and database with tables	18	<u>L9</u>
<u>L8</u>	L7 and quer\$	53	<u>L8</u>
<u>L7</u>	L6 and server	75	<u>L7</u>
<u>L6</u>	L5 and copies	75	<u>L6</u>
<u>L5</u>	L4 and local near cache	102	<u>L5</u>
<u>L4</u>	L3 and database	2080	<u>L4</u>
<u>L3</u>	L1 and (uniform adj resource adj locator or url)	2890	<u>L3</u>
<u>L2</u>	L1 and uniform adj resource adj locator or url	6729	<u>L2</u>
<u>L1</u>	internet and web near page	6045	<u>L1</u>

END OF SEARCH HISTORY